

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE
DALLAS, TEXAS 75202-2733

FACT SHEET

PROPOSED NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT AND REPORTING REQUIREMENTS FOR THE FINAL BENEFICIAL REUSE OR DISPOSAL OF MUNICIPAL SEWAGE SLUDGE

AGENCY: Environmental Protection Agency (EPA)

ACTION: Pursuant to section 405(f)(1) of the Clean Water Act (CWA) EPA is proposing a General Permit to treatment works treating domestic sewage (TWTDS), including publicly owned treatment works (POTWs), in the State of Arkansas. Notice is for the draft general permit for the land application, surface disposal, and disposal in a municipal solid waste landfill (MSWLF) of sewage sludge generated during the treatment of domestic sewage in a treatment works.

SUMMARY: The CWA states that all permits issued under section 402 include requirements for the use and disposal of sludge that implement the regulations established (40 CFR Part 503 and 40 CFR Part 258) pursuant to section 405(d) of the CWA.

The State of Arkansas currently has authorization to implement the National Pollutant Discharge Elimination System (NPDES) program. However, it does not have authorization to implement the Federal sewage sludge program. EPA is proposing this permit to assure sewage sludge is beneficially reused or disposed in accordance with regulations to protect human health and the environment. The 40 CFR Part 503 Standards found in 58 FR 9248, 9404 consist of general requirements, pollutant limits, management practices, and operational standards, for the final use or disposal of sewage sludge generated during the treatment of domestic sewage in a treatment works. Reuse or disposal methods addressed in the general permit include sewage sludge applied to the land, placed on a surface disposal site, and disposed in a municipal solid waste landfill. This notice requests comments on the general permit.

DATES: Comments on the proposed permit must be received on or before 60 days following the date of publication in the Federal Register

ADDRESSES: The public should send an original and two copies of their comments addressing any aspect of this notice to Wilma Turner, Administrative Team of the Water Quality Protection Division (6WQ-CA) U.S. Environmental Protection Agency Region 6, 1445 Ross Ave. Suite 1200, Dallas, Texas 75202 (214) 665-7516.

The public record is located at EPA Region 6, and is available upon written request. Requests for copies of the public record should be addressed to Ellen Caldwell at the address above. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: For further information on the proposed draft general permit contact Wilma Turner, Administrative Team of the Water Quality Protection Division (6WQ-CA), U.S. Environmental Protection Agency Region 6,

1445 Ross Ave., Suite 1200, Dallas, Texas 75202 (214) 665-7516. A copy of the fact sheet and permit may be found on the EPA Region 6 web page at [HTTP://WWW.EPA.GOV/REGION6/6WQ/NPDES/GENPERMT.HTM](http://www.epa.gov/region6/6WQ/NPDES/GENPERMT.HTM).

HEARINGS: A public meeting and hearing is scheduled for September 30, 1998, at the following location:

La Quinta Inn, Otter Creek
11701 Interstate 30
Little Rock, AR 72209
Phone: 501-455-2300

The meeting will provide information on the permit conditions and the hearing will allow for public comment on the permit.

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I. Background

The enactment of the Water Quality Act (WQA) of 1987 amended section 405 of the CWA, setting forth a comprehensive program for reducing the environmental risks and maximizing the beneficial reuse of sewage sludge. After the 40 CFR Part 503 technical sludge standards were promulgated on February 19, 1993, the direction for the regulation of sewage sludge management activities were changed. Section 405 of the CWA clearly requires that NPDES permits contain conditions implementing the sludge technical standards, unless those standards have been included in a permit issued under a State program approved for administering a section 405(f) sludge permitting program.

The Act allows States to request EPA authorization to administer the NPDES program instead of EPA. In addition, section 405(f) of the CWA allows a State to choose to regulate sludge through its NPDES program or through another permitting program (e.g. solid waste programs). At this point,

Arkansas has not received authorization to implement the sewage sludge program when it receives authorization to issue NPDES permits for municipal and industrial sources. EPA therefore will continue to be responsible for assuring that all TWTDS (including POTWs) in Arkansas obtain a permit containing the technical sludge requirements.

II. Framework of NPDES System

Section 405(f) of the CWA requires that any permit issued under section 402 of the Act to a POTW or any other TWTDS shall include the regulations established pursuant to section 405(d) of the CWA, unless such requirements have been included in a permit issued under the appropriate provisions of subtitle C of the Solid Waste Disposal Act, Part C of the Safe Drinking Water Act, the Marine Protection, Research, and Sanctuaries Act of 1972, or the Clean Air Act.

III. Permitting

A. Prior Permitting

Prior to the enactment of the WQA of 1987, regulatory authority and control of the use and disposal of sewage sludge were scattered among various statutes and programs and did not provide States and municipalities with comprehensive guidelines on which to base sludge management decisions. The standards applying to sewage sludge reuse and disposal prior to section 405 of the CWA were 40 CFR Part 257.

B. Permit Application Regulations

1. Regulations requiring POTW NPDES/Sludge Permit Coverage

In accordance with 40 CFR Subpart 122.21(c)(2), all POTWs and any other existing TWTDS are required to apply for a NPDES permit. POTWs generating/treating/blending/disposing of sewage sludge are subject to the application submission deadlines as defined in the February 19, 1993, Federal Register. 40 CFR Subpart 122.21(a) excludes persons covered by general permits from requirements to submit individual permit applications. Coverage under this general permit will eliminate the operators need to apply for an individual sewage sludge permit. However, if EPA determines that coverage under the general permit is not appropriate for a TWTDS, the facility will be notified to apply for coverage under an individual permit.

2. Regulations Requiring All Other TWTDS Coverage

All other TWTDS must apply for a permit. A TWTDS is defined in 40 CFR Subparts 122.2 and 501.2 as "a POTW or any other sewage sludge or waste water treatment devices or systems, regardless of ownership (including federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This includes facilities that generate sewage sludge, or otherwise effectively control the quality or change the characteristics of sewage sludge (e.g., blenders), or the manner in which it is disposed". In addition, all TWTDS disposing of sewage sludge in a State-permitted Municipal Solid Waste Landfill (MSWLF) must also apply for a permit. 40 CFR Part 503 requires all sewage sludge disposed in a MSWLF meet the requirements in 40 CFR Part 258 concerning the quality of the materials disposed.

3. *Application of General Permit*

General permits are an important tool for assuring adequate environmental safeguards for large numbers of similar facilities without the administrative and resource burdens involved in individual permit issuance. EPA wants to emphasize that, except for the procedural differences set out at 40 CFR Subpart 122.28 in the NPDES regulations, general permits are analogous to individual permits in every respect. General permits are still subject to the same reporting and monitoring requirements, limitations, enforcement provisions, penalties, and other substantive requirements as individual permits. General permits should be viewed as an administrative tool enabling the issuance of one permit to authorize a group of dischargers. Most general permits utilize the notification of permitting authority as a mechanism to register covered facilities.

This public notice specifies that official notification is required for coverage under this general permit. Notifying EPA under a general permit is a mechanism which can be used to establish an accounting of the number of permittees covered by the general permit, the nature of operations at the facility generating the sewage sludge, and the identity and location of sludge disposal sites. This type of information is appropriate since the sewage sludge is being monitored and tracked. This permit will apply to all TWTDS (including POTWs) covered by permitting requirements under 40 CFR Part 503 and 40 CFR Part 258.

4. *Individual Permit Application Requirements*

The requirements for an individual permit application are found in 40 CFR Subpart 501.15(a)(2). The information is intended to develop the site-specific conditions generally associated with individual permits. Individual permit applications may be needed under several circumstances. Examples include: General permits, where the TWTDS authorized by a general permit to final reuse or dispose sewage sludge, is requesting to be excluded from the coverage of the general permit by applying for a permit (see 40 CFR Subpart 122.28(b)(2)(iii) for EPA issued general permits); or the Director requiring a TWTDS authorized by a general permit to apply for an individual permit (see 40 CFR Subpart 122.28(b)(2)(ii) for EPA issued general permits).

Advantages of a General Permit

- * General requirements and recommended management practices will be established for final reuse and disposal practices covered by the permit;
- * Facilities whose final reuse and disposal practices are covered by the permit will have an opportunity to comply with the CWA and will therefore, be afforded some protection from third-party litigation;
- * The public will have the opportunity through the Agency to review monitoring reports and information on permitting activities for POTW's final reuse and disposal practices of municipal sewage sludge;
- * TWTDS without an existing permit will automatically have requirements to comply with Technology and Management requirements.

C. *Burdens on Permitting Agencies*

The focal issue in developing a general permit for POTWs in Arkansas covering final reuse and disposal of municipal sewage sludge is to provide an expedient and economic permitting option for both the regulated community and the permitting Agency.

Implementing a permitting program is a complex process. The steps in developing individual permits are very resource intensive. The issuance of a general permit to reduce the administrative burden benefits the Agency, the tax payer, and the environment. Major steps to issue a permit include:

- * *Training of Permit Writers.* Permit writers must acquire the appropriate

expertise necessary for writing permits.

- * *Permit Application Review.* Permit applications (or notices of intent to be covered under a general permit) that are received initially must be screened and reviewed for completeness. When this review indicates that necessary information has not been provided, the applicant must be notified and an explanation of the deficiency provided. Applications that are complete must be assigned to a permit writer and filed.
- * *Preparing a Draft Permit.* Preparing a draft permit and fact sheet involves a technical evaluation of the final sewage sludge reuse and disposal practices based on a review of the permit application or other appropriate information. The appropriate factors associated with technology-based or water quality-based standards must be evaluated. Appropriate effluent limitations, monitoring requirements, and any special conditions need to be developed.
- * *Public Notice of the Draft Permit.* Draft permits must undergo appropriate public notice. In some cases public hearings must be held.
- * *Permit Issuance.* Public comments must be received, evaluated, and responded to in developing a final permit. Any request for an evidentiary hearing must be addressed.
- * *Compliance Monitoring/Enforcement.* A number of compliance monitoring activities can be conducted including reviewing discharge monitoring reports, conducting site inspections, and evaluating other information. Enforcement actions include assessing penalties and issuing administrative orders. In some cases, enforcement actions lead to litigation.

In addition to these steps, a number of administrative functions, such as responding to public inquiries, can create burdens for permit issuing agencies. The number of such inquiries can be particularly high when a general permit covering a large regulated community is involved.

IV. Draft General Permit for Final Beneficial Reuse and Disposal of Municipal Sewage Sludge

A. Today's Notice

Today's notice proposed a general permit for final beneficial reuse and disposal of municipal sewage sludge in Arkansas. The following portion provides notice for the draft general permit and accompanying fact sheet for a general Sewage Sludge permit in Arkansas. This draft general permit is intended to cover the final beneficial reuse and disposal of municipal sewage sludge in accordance with the Standards for the Use or Disposal of Sewage Sludge 40 CFR Part 503. The proposed permit contains: The Federal guidelines to insure that the permittee's practices do not pose a threat to human health and the environment due to toxic pollutants and pathogens. In addition, the permit requires sewage sludge applied at an agronomic rate apply to both nitrogen and phosphorous for all sewage sludge beneficially reused. Nitrogen shall be considered the limiting pollutant in unimpaired watershed areas. Phosphorous shall be considered the limiting pollutant when the sewage sludge is land applied in an impaired watershed area. Impaired watershed areas are defined in the 1998 Arkansas' Water Quality Limited Waterbodies - 303(d) list. A copy of the list can be obtained from Mr. Bill Keith, Arkansas Department of Pollution Control and Ecology, P.O. Box 8913, Little Rock, Arkansas 72219-8913.

Effective Date of Requirements.

This permit shall be effective upon issuance.

EPA Contacts.

United States EPA, Region 6, Water Quality Protection Division, (6WQ-PO). First Interstate Bank Tower at Fountain Place, 1445 Ross Avenue, 12th

Floor, Suite 1200, Dallas, TX 75202.

Comment Period Closes

Comments on the proposed permit must be received on or before 60 days following publication in the Federal Register.

B. Fact Sheet for Draft General Permit

Publication of this draft general permit and fact sheet is designed to comply with 40 CFR Subpart 124.10 (Public Notice of Permit Action and Public Hearing) simultaneously for the draft general permit being noticed today. The language of the draft general permits is provided at the end of the preamble of this notice.

1. Coverage Under the Proposed General Permit

Facilities Defined as TWTDS. Those facilities generating, treating or blending (i.e., changing the quality) of sewage sludge, or those facilities used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. The permit being proposed is intended to cover all TWTDS (including POTWs) in the State of Arkansas with requirements for the final reuse or disposal of municipal sewage sludge.

Designated Treatment Works Treating Domestic Sewage. The Regional Administrator may designate any facility a TWTDS if he or she becomes aware of facilities which do not automatically fit the definition of TWTDS, but finds that the facility poses a potential for adverse effects on the public health and the environment from poor sludge quality or poor sludge handling, use or disposal practices, or where he or she finds that such designation is necessary to insure that such person is in compliance with 40 CFR Part 503.

POTWs with Pending Application. Some existing TWTDS have submitted applications in accordance with NPDES requirements and have remained unpermitted due to the administrative work load and priorities. All of these applicants will gain coverage under the sewage sludge program through the issuance of this permit. Region 6 believes this benefits those applicants without a permit. Any permittee desiring an individual permit may petition the Director in accordance with 40 CFR Subpart 122.28(b)(3)(iii).

2. Limitations on Coverage

Coverage under this permit may be denied to any POTW the Regional Administrator determines has the potential for adverse effects on public health and the environment from poor sludge quality or poor sludge handling, use or disposal practices, or where he or she finds that such designation is necessary to ensure compliance with 40 CFR Part 503. The permittee will be notified that the Regional Administrator has made such a determination and will be required to submit an individual permit application on or before a date specified in the notification. The permittee may petition for more time if the permittee can show just cause for the delay.

3. Permit Conditions

a. Description of draft permit conditions. The conditions of this draft permit have been developed to be consistent with the self implementing requirements of the 40 CFR Part 503 regulations. The draft permit contains requirements for TWTDS (including POTWs) that land apply municipal sewage sludge, surface dispose municipal sewage sludge, and dispose of municipal sewage sludge in a municipal solid waste landfill.

(1) For sewage sludge that is land applied, permit conditions specifically address the following: (A) Requirements specific to bulk sewage sludge for application to the land meeting class A or B pathogen reduction and the cumulative loading rates in Table 2 of the permit, or class B pathogen

reduction and the pollutant concentrations in Table 3 of the permit. (B) Requirements specific to bulk sewage sludge meeting pollutant concentrations in Table 3 of the permit and Class A pathogen reduction requirements. (C) Requirements specific to sludge sold or given away in a bag or other container for application to the land that does not meet the pollutant concentrations in Table 3 of the permit.

(2) For sewage sludge that is surface disposed, permit conditions specifically address the following: (A) Requirements specific to surface disposal sites without a liner and leachate collection system. (B) Requirements specific to surface disposal sites with a liner and leachate collection system.

(3) For sewage sludge that is disposed in a municipal solid waste landfill, 40 CFR Subpart 503.4 states that permit conditions require sewage sludge disposed to meet the quality requirements of 40 CFR Part 258. Major POTWs (those POTWs with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more, or any POTW required to have an approved pretreatment program under 40 CFR Subpart 403.8(a)) disposing of sewage sludge in a municipal solid waste landfill are required to conduct a Toxicity Characteristic Leaching Procedure (TCLP) test once/permit life to determine if the sludge is hazardous as well as an annual paint filter test to assure that the sludge does not contain free liquids. Compliance with these testing requirements will assure that the sewage sludge meets the quality requirements.

(4) The draft permit also contains conditions that reflect EPA's decision to select several best management practices to assure compliance with the regulations for land application and surface disposal. These best management practice requirements apply to those POTWs for each final sewage sludge reuse or disposal practice. These facilities will be required to conduct a TCLP test once/permit life performed within one year from the effective date of the permit. This test is one method used to determine whether a solid waste is hazardous. If the sludge fails the test and is therefore hazardous, then the 40 CFR Part 503 regulations do not apply, and the facility will be required to dispose of the sludge in accordance with 40 CFR Part 262, Standard Applicable to Generators of Hazardous Waste. In addition, these same types of POTWs land applying and surface disposing of sewage sludge will be required to conduct an annual poly-chlorinated biphenyls (PCBs) analysis in order to demonstrate that the concentration of PCBs in the sludge does not exceed 50 mg/kg. If the concentration of PCBs in the sludge exceeds 50 mg/kg, then the disposal requirements found at 40 CFR Part 761 will apply. The 40 CFR Part 503 regulations do not apply to sludge exceeding this concentration. POTWs land applying and surface disposing sewage sludge with less than 1 mgd design flow and not meeting the listed criteria above, will not be required in the general permit to conduct an annual TCLP test and an annual PCBs test since the Region has determined that it is unlikely that most small facilities accept industrial waste that would contribute to concentrations of pollutants in excess of the TCLP and PCBs testing criteria. Other TWTDS (sludge only facilities) are not required to conduct a TCLP test if the sludge is land applied or surface disposed.

b. Sludge Quality Limitations. Specific numerical permit conditions for metals are dependent upon the quality of the sludge as well as the method used by the TWTDS for the final reuse or disposal of municipal sewage sludge. Following is a listing of the numerical criteria for metals that must be met dependent on these factors for land application and surface disposal.

(1) Land Application

(A) All sewage sludge land applied must not contain concentrations of pollutants that exceed the following:

TABLE 1

<u>Pollutant</u>	<u>Ceiling Concentrations</u> <u>(milligrams per kilogram)*</u>
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Arsenic	75
Cadmium	85
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7500

(B) Bulk sewage sludge applied to the land may either reach compliance through either TABLE 2 OR TABLE 3:

TABLE 2
Cumulative Pollutant Loading Rate for Entire Site Life:

<u>Pollutant</u>	<u>Cumulative Pollutant Loading Rate (kilograms per hectare)</u>
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Molybdenum	Monitor
Nickel	420
Selenium	100
Zinc	2800

TABLE 3
Pollutant Concentrations:

<u>Pollutant</u>	<u>Pollutant Concentrations (milligrams per kilogram*)</u>
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Molybdenum	Monitor
Nickel	420

Selenium	100
Zinc	2800

* Dry weight basis

(C) Sewage sludge sold or given away in a bag or other container that exceeds the pollutant concentration criteria in Table 3 above must meet the following annual pollutant loading rates.

TABLE 4

<u>Pollutant</u>	<u>Annual Pollutant Loading Rate (kg per hectare/365 day period)</u>
Arsenic	2.0
Cadmium	1.9
Copper	75
Lead	15
Mercury	0.85
Molybdenum	Monitor
Nickel	21
Selenium	5.0
Zinc	140

(2) Surface Disposal

(A) For surface disposal sites without a liner and leachate collection system, the concentration of the pollutants in the sludge must be below the following criteria dependent on the distance of the surface disposal site from the property line.

TABLE 5

<u>Unit boundary to property line</u>	<u>Pollutant concentration*</u>		
<u>Distance (meters)</u>	<u>Arsenic (mg/kg)</u>	<u>Chromium (mg/kg)</u>	<u>Nickel (mg/kg)</u>
0 to less than 25	30	200	210
25 to less than 50	34	220	240
50 to less than 75	39	260	270
75 to less than 100	46	300	320
100 to less than 125	53	360	390
125 to less than 150	62	450	420
Equal to or greater than 150	73	600	420

* Dry weight basis

(3) Disposal in a Municipal Solid Waste Landfill

No numerical concentration criteria (mg/kg) or loading rates (kg/ha) for

metals are applicable.

c. Non-numeric Limitations, best management practices, and other conditions.

(1) Land Application.

(A) Requirements specific to bulk sewage sludge for application to the land meeting class A or B pathogen reduction and the cumulative pollutant loading rates in Table 2 in the permit, or class B pathogen reduction and the pollutant concentrations in Table 3 in the permit.

The permit requires sewage sludge land application be prohibited if it is likely to adversely affect a threatened or endangered species listed under section 4 of the Endangered Species Act or its designated critical habitat. Bulk sewage sludge cannot be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered where the bulk sewage sludge enters a wetland or other waters of the United States.

The permit requires bulk sewage sludge be applied to the agricultural land, forest, or a public contact site at a rate that does not exceed an agronomic rate. This requirement also applies to reclamation sites. An agronomic rate is the whole sludge application rate for a bulk sewage sludge designed: (1) To provide the amount of nitrogen needed by the crop or vegetation grown on the land and (2) to minimize the amount of nitrogen in the bulk sewage sludge passing below the root zone for the crop or vegetation grown on the land to the ground water. The key to the definition is the design of the whole sludge application rate.

Several factors must be considered to design an agronomic rate for a land application site. These include, but are not limited to the amount of nitrogen needed by the crop or vegetation grown on the land; the amount of organic nitrogen from previous applications of nitrogen-containing materials that becomes available each year; the type of soil at the site; and the geologic conditions of the site. Information about where to obtain information on appropriate agronomic loading rates are given in the permit.

(B) Requirements specific to bulk sewage sludge meeting pollutant concentrations in Table 3 in the permit and Class A pathogen reduction requirements.

No sludge management practices apply.

(C) Requirements specific to sludge sold or given away in a bag or other container for application to the land not meeting the pollutant concentrations in Table 3 in the permit.

One management practice for sewage sludge sold or given away in a bag or other container for application to the land requires labelling of the bag or other container in which the sewage sludge is sold or given away or that an information sheet be provided to the person who receives the sewage sludge that is sold or given away in another container. The label or information sheet must contain the name and address of the person who prepares the sewage sludge that is sold or given away, a statement prohibiting application of the sewage sludge to the land except in accordance with the instructions on the label or information sheet, and the application rate for the sewage sludge.

(2) Surface Disposal

Requirements specific to surface disposal sites without a liner and leachate collection system, and with a liner and leachate collection system.

The permit provides that placement of sewage sludge on an active surface disposal site is prohibited if it is likely to adversely affect a threatened or endangered species listed under section 4 of the Endangered species act or its designated critical habitat.

An active surface disposal site is required to not restrict the flow of the base flood. A base flood is a flood that has a one percent chance of occurring in any given year (i.e., a flood with a magnitude equaled once in 100 years). Thus, an active surface disposal site cannot restrict the flow in an area carrying the 100-year flood. This management practice reduces the potential for the area carrying the 100-year flood to experience problems related to the location of the surface disposal site (e.g., restriction of the flow) in the area. It also protects the surface disposal site and the sewage sludge placed on it from the impacts of a base flood.

An active surface disposal site is required to be designed to withstand the maximum recorded horizontal ground level acceleration when it is located in a seismic impact zone. One purpose of this management practice is to protect its foundation from cracks caused by ground motion that could lead to collapse of the active site.

An active surface disposal site is required to be located 60 meters or more from a fault that has displacement in Holocene time.

An active surface disposal site cannot be located in an unstable area. An unstable area is an area of land subject to natural or human-induced forces that may damage the structural components of the surface disposal site. To determine whether an area is unstable, the following factors should be considered, among other things: (i) Soil conditions causing differential settling; (ii) geologic or geomorphologic features such as areas prone to mass movement, Karst terrains, or fissures; (iii) surface areas weakened by the withdrawal of oil, gas, or water; and (iv) other features that indicate protective measures cannot be designed to withstand a natural event such as a volcanic eruption.

For those surface disposal sites with a liner and leachate collection system, the collection system must have the capacity to handle run-off from the 24-hour, 25-year storm event. The runoff from this storm event must be collected and disposed in accordance with the NPDES permit requirements and any other applicable requirements during the time the site is active and for three years after the surface disposal site closes. This management practice protects surface waters from pollutants in the run-off. Leachate collected shall also be disposed in accordance with NPDES permit requirements and other applicable requirements.

The permit requires that the leachate collection system for a surface disposal site with a liner and leachate collection system be operated and maintained for the period that the surface disposal site is active and for three years after the surface disposal site closes.

The permit also contains a management practice requiring monitoring for methane gas when a cover is placed on the surface disposal site. When an active surface disposal site is not covered, the requirement to monitor methane gas does not apply. The value for the percent of methane gas in the air in any structure within the property line of the surface disposal site is 25 percent of the lower explosive limit for methane gas. The value for the percent of methane gas in the air at the property line of a surface disposal site is the lower explosive limit for methane.

Food, feed, and fiber crops cannot be grown on a surface disposal site. The exposure assessment on which the pollutant limits were based did not consider growing crops on the land where the sewage sludge is placed.

Restrictions on animal grazing on a surface disposal site are included in the permit because grazing of animals and exposure of the public to sewage sludge were not considered in the exposure assessment used to develop the pollutant limits for surface disposal.

Public access to a surface disposal site is also restricted for the period the surface disposal site is active and for three years after the surface disposal site closes.

The last management practice requires an owner/operator of a surface disposal site to demonstrate that the sewage sludge does not contaminate an aquifer after placement on the site. The owner/operator

may demonstrate compliance in one of two ways. Compliance may be demonstrated through a ground water monitoring program. Alternatively, the owner/operator may demonstrate compliance through the certification of a qualified ground water scientist that an aquifer is not contaminated.

When the owner/operator chooses to demonstrate compliance through ground water monitoring, EPA recommends that the owner/operator develop a formal ground water monitoring plan. Such a plan shall include a description of the location of the active surface disposal site; a description of the ground water monitoring system, including the number, spacing, and depths of the monitoring wells; a description of how the existing level of nitrate in the ground water was determined; and the frequency of sampling, sampling protocol, and sample analytical methods.

(3) Disposal in a Municipal Solid Waste Landfill

(A) If the permittee generates sewage sludge and supplies that sewage sludge to the owner or operator of a MSWLF for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.

(B) Sewage sludge shall be tested once/permit life, within one year from the effective date of the permit in accordance with the method specified at 40 CFR 268, Appendix I (Toxicity Characteristic Leaching Procedure (TCLP)) or other approved methods on those POTWs with a design flow rate equal to or greater than one million gallons per day (mgd), and POTWs that serve 10,000 people or more, or any POTW required to have an approved pretreatment program under 40 CFR 403.8(a) for each final sewage sludge reuse or disposal practice. This provision does not apply to those POTWs with a design flow of less than one mgd or to other TWTDS (sludge only facilities). Sludge shall be tested after final treatment prior to leaving the POTW site. Sewage sludge determined to be a hazardous waste in accordance with 40 CFR Part 261, shall be handled according to RCRA standards for the disposal of hazardous waste in accordance with 40 CFR Part 262. The disposal of sewage sludge determined to be a hazardous waste, in other than a certified hazardous waste disposal facility shall be prohibited. The Information Management Section, telephone no. (214) 665-6750, and the appropriate state agency shall be notified of test failure within 24 hours. A written report shall be provided to this office within 7 days after failing the TCLP. The report will contain test results, certification that unauthorized disposal has not occurred and a summary of alternative disposal plans that comply with RCRA standards for the disposal of hazardous waste. The report shall be addressed to: Director, Multimedia Planning and Permitting Division, EPA Region 6, Mail Code 6PD, 1445 Ross Avenue, Dallas, Texas 75202. A copy of this report shall be sent to the Chief, Water Enforcement Branch, Compliance Assurance and Enforcement Division, Mail Code 6EN-W, at the same street address.

(C) Sewage sludge shall be tested as needed, or at a minimum, once/year in accordance with the method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846).

d. Recordkeeping Procedures. Recordkeeping procedures are required for each final sewage sludge reuse or disposal practice.

(1) Land Application

The recordkeeping requirements contained in the permit for bulk sewage sludge and sewage sludge sold or given away in a bag or other container for application to the land specifies the information that must be developed. The requirements also specify the person who must develop and retain the information, and the period that the information must be retained. The information that must be developed varies depending on which pollutant limits are met and on which pathogen and

vector attraction reduction requirements are met. In most cases, records should be retained five years. However, when cumulative pollutant loading rates are met, records for certain information have to be retained indefinitely. The reason for this requirement is that a cumulative pollutant loading rate is the cumulative amount of an inorganic pollutant that can be applied to the land. To know how much of an inorganic pollutant has been applied to the land in bulk sewage sludge, a record must be retained indefinitely.

(2) Surface Disposal

The permit contains recordkeeping requirements for sewage sludge placed on a surface disposal site. The person who prepares the sewage sludge must develop certain information (e.g., the concentration of pollutants in the sewage sludge for sites without a liner and leachate collection system) and retain the information for five years. In addition, the owner/operator of a surface disposal site also must develop certain information (e.g., a certification that the management practices for active sewage sludge unit are met) and retain that information for five years.

(3) Disposal in Municipal Solid Waste Landfill

The recordkeeping requirements for sewage sludge disposed of in a municipal solid waste landfill follow: The permittee shall develop the following information and shall retain the information for five years.

- i. The description, including procedures followed, and results of the Paint Filter Tests performed.
- ii. The description, including procedures followed, and results of the TCLP Test.

e. Reporting Procedures. Reporting procedures are required to be conducted by only those POTWs with a design flow rate equal to or greater than one mgd, and POTWs that serve 10,000 people or more, or any POTW required to have an approved pretreatment program under 40 CFR Part 403.8(a) for each final sewage sludge reuse or disposal practice. Information contained in the report varies depending on the land application, surface disposal, and disposal of sewage sludge in a municipal solid waste landfill, the applicable numerical criteria that apply, and the pathogen and vector attraction reduction requirements that are met. Reports are due each February 19 and cover the previous calendar year, January 1 through December 31. Other than those defined above, all remaining TWTDS, including those POTWs with a design flow less than 1.0 mgd are not required to report.

5. Reopener Clause

If requirements for sludge management practices or pollutant criteria become more stringent than the sludge pollutant limits or acceptable management practices in this permit, or control a pollutant not listed in this permit, this permit may be modified or revoked and reissued to conform to the requirements promulgated at section 405(d)(2) of the Clean Water Act.

6. Definitions

Region 6 requests comments on any terms referred to in this permit which are not defined.

V. Economic Impact

EPA believes that this proposed general permit will be economically beneficial to the regulated community. It provides an economic alternative to the individual application process the facilities covered by this permit would otherwise have to face. The requirements are consistent with those already imposed by effective federal regulations.

An economic analysis was prepared when the 40 CFR Part 503 regulations were proposed and finalized. Region 6 believes that the general permit conditions provide the same requirements as the self-implementing requirements under the 40 CFR Part 503 rule. Also Region 6 believes that this general

permit is the most economical permitting option available to all TWTDS with NPDES application requirements.

VI. Compliance with other Federal Regulations

A. National Environmental Policy Act

Section 511(c)(1) of the CWA excludes this action from the National Environmental Policy Act of 1969.

B. Endangered Species Act

The Endangered Species Act (ESA) of 1973 requires Federal Agencies such as EPA to ensure, in consultation with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the Services) that any actions authorized, funded, or carried out by the Agency (e.g., EPA issued sewage sludge permits requiring compliance with the conditions in the 40 CFR Part 503 regulations) are not likely to adversely affect the continued existence of any federally-listed endangered or threatened species or adversely modify or destroy critical habitat of such species (see 16 U.S.C. 1536(a)(2), 50 CFR Part 402 and 40 CFR Subpart 122.49(c)).

Accordingly, sewage sludge final reuse and disposal activities that are likely to adversely affect species identified in Addendum A of the permit are not eligible for coverage under this sewage sludge general permit.

To be eligible for coverage under the sewage sludge general permit, applicants are required to review the list of species and their locations which are contained in Addendum A of this permit and which are described in the instructions for completing the application requirements under this permit. If an applicant determines that none of the species identified in Addendum A are found in the county in which the TWTDS, surface disposal site or land application site is located, then there is no likelihood of an adverse effect and they are eligible for permit coverage. Applicants must then certify that their operation is not likely to adversely affect species and will be granted sewage sludge general permit coverage 48 hours after the date of the postmark on the envelope used to mail in the notification.

If species identified in Addendum A are found to be located in the same county as the TWTDS, surface disposal site, or land application site, then the applicant next must determine whether the species are in proximity to the sites. A species is in proximity if a species is located in the area of the site where sewage sludge will be generated, treated, reused or final disposed. If an applicant determines there are no species in proximity to the potential sites, then there is no likelihood of adversely affecting the species and the applicant is eligible for permit coverage.

If species are in proximity to the sites, as long as they have been considered as part of a previous ESA authorization of the applicant's activity, and the environmental baseline established in that authorization is unchanged, the applicant may be covered under the permit. For example, an applicant's activity may have been authorized as part of a Section 7 consultation under ESA, covered under a Section 10 permit, or have received a clearance letter. The environmental baseline generally includes the past and present impacts of all federal, state and private actions that were contemporaneous to an ESA authorization. Therefore, if a permit applicant has received previous authorization and nothing has changed or been added to the environmental baseline established in the previous authorization, then coverage under this permit will be provided.

In the absence of such previous authorization, if species identified in Addendum A are in proximity to the sites, then the applicant must determine whether there is any likely adverse affect upon the species. This is done by the applicant conducting a further examination or investigation, or an alternative procedure, described in the instructions in Addendum A of the permit and contacting the Services for consultation. If the applicant determines there is no likely adverse effect upon the species, then the applicant is eligible for permit coverage. If the applicant determines that there likely is, or will likely be an adverse affect, then the applicant is not eligible for general permit coverage.

All TWTDS applying for coverage under this permit must provide in the

notification to EPA the following information: 1) a determination as to whether there are any species identified in Addendum A in proximity to the sites, and 2) a certification that their sewage sludge treatment, reuse, or disposal are not likely to adversely affect species identified in Addendum A, or are otherwise eligible for coverage due to a previous authorization under the ESA. Coverage is contingent upon the applicant's providing truthful information concerning certification and abiding by any conditions imposed by the permit.

TWTDS who are not able to determine that there will be no likely adverse affect to species or habitats and cannot sign the certification to gain coverage under this sewage sludge general permit, must apply to EPA for an individual sludge only permit. As appropriate, EPA will conduct Section 7 consultation when issuing such individual permits.

Regardless of the above conditions, EPA may require that a permittee apply for an individual sewage sludge permit on the basis of possible adverse effects on species or critical habitats. Where there are concerns that coverage for a particular discharger is not sufficiently protective of listed species, the Services (as well as any other interested parties) may petition EPA to require that the discharger obtain an individual NPDES permit and conduct an individual Section 7 consultation as appropriate.

In addition, the Assistant Administrator for Fisheries for the National Oceanic and Atmospheric Administration, or his/her authorized representative, or the U.S. Fisheries and Wildlife Service (as well as any other interested parties) may petition EPA to require that a permittee obtain an individual sewage sludge permit. The permittee is also required to make the recordkeeping information required by the 40 CFR Part 503 regulations and the permit available upon request to the Assistant Administrator for Fisheries for the National Oceanic and Atmospheric Administration, or his/her authorized representative, or the U.S. Fisheries and Wildlife Service Regional Director, or his/her authorized representative.

These mechanisms allow for the broadest and most efficient coverage for the permittee while still providing for the most efficient protection of endangered species. It significantly reduces the number of TWTDS that must be considered individually and therefore allows the Agency and the Services to focus their resources on those discharges that are indeed likely to adversely affect water-dependent listed species. Straightforward mechanisms such as these allow applicants with expedient permit coverage, and eliminates "permit limbo" for the greatest number of permitted discharges. At the same time it is more protective of endangered species because it allows both agencies to focus on the real problems, and thus, provide endangered species protection in a more expeditious manner. Prior to the publication of the public notice of this draft permit in the Federal Register, both Services concurred that the draft permit will not adversely affect listed species. Comments submitted by both agencies were addressed in the draft permit as requested.

C. National Historic Preservation Act

The National Historic Preservation Act (NHPA) prohibits Federal actions that would affect a property that either is listed on, or is eligible for listing, on the National Historic Register. EPA therefore cannot issue permits to treatment works treating domestic sewage (including publicly owned treatment works (POTWs) affecting historic properties unless measures will be taken such as under a written agreement between the applicant and the State Historic Preservation Officer (SHPO) outlining all measures to be undertaken by the applicant to mitigate or prevent adverse effects to the historic property. Therefore, under today's permit land applying, surface disposing, or disposing of sewage sludge in a municipal solid waste landfill may be covered only if the action will not affect a historic property that is listed or is eligible to be listed in the National Historic Register, or the operator has obtained and is in compliance with a written agreement signed by the State Historic Preservation Officer (SHPO) that outlines measures to be taken to mitigate or prevent adverse effects to the historic site. The permittee is required to follow the notification procedures outlined in Addendum B of the permit. Prior to the publication of the public notice of this draft permit in

the Federal Register, the Arkansas Department of Culture, Recreation, and Tourism determined it had no objections to the general permit based on the NHPA. Comments submitted by the agency were addressed in the draft permit as requested.

D. Executive Order 12866

Under Executive Order 12866, (58 FR 51735 [October 4, 1993]) the Agency must determine whether the regulatory action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities; create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order. It has been determined that this general permit is not a "significant regulatory action" under the terms of Executive Order 12866.

E. Paperwork Reduction Act

The information collection required by this permit has been approved by OMB under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., in submission made for the NPDES permit program and assigned OMB control number 2040-0004 for the discharge monitoring reports. Permit application and Notice of Intent information has been assigned the OMB control number 2040-0086.

F. Regulatory Flexibility Act

Under the Regulatory Flexibility Act (RFA), 5 U.S.C. 601 et seq., a Federal agency must prepare an initial regulatory flexibility analysis "for any proposed rule" for which the agency "is required by section 553 of [the Administrative Procedure Act (APA)], or any other law, to publish general notice of proposed rulemaking." The RFA exempts from this requirement any rule that the issuing agency certifies "will not, if promulgated, have a significant economic impact on a substantial number of small entities."

EPA did not prepare a regulatory flexibility analysis (IRFA) for the proposed permit. EPA views issuance of a "sewage sludge only" general permit to not be subject to rulemaking requirements, including the requirement for a general notice of proposed rulemaking, under APA section 553 or any other law, and is thus not subject to the RFA requirement to prepare an IRFA. The EPA concluded that the permit, if issued as drafted, would not have a significant impact on a substantial number of small entities. NPDES general permits are not "rules" under the APA and thus not subject to the APA requirement to publish a notice of proposed rulemaking. NPDES general permits are also not subject to such a requirement under the Clean Water Act (CWA). While EPA publishes a notice to solicit public comment on draft general permits, it does so pursuant to the CWA section 402(a) requirement to provide "an opportunity for a hearing."

G. Unfunded Mandates Reform Act

Section 201 of the Unfunded Mandates Reform Act (UMRA), P.L. 104-4, generally requires Federal agencies to assess the effects of their "regulatory actions" on State, local, and tribal governments and the private sector. UMRA uses the term "regulatory actions" to refer to regulations. (See, e.g., UMRA section 201, "Each agency shall . . . assess the effects of Federal regulatory actions . . . (other than to the extent that such regulations incorporate requirements specifically set forth in law)" (emphasis added)). UMRA section 102 defines "regulation" and "rule" by reference to section 658 of Title 2 of

the U.S. Code, which in turn defines "regulation" and "rule" by reference to section 601(2) of the RFA. That section of the RFA defines "rule" as "any rule for which the agency publishes a notice of proposed rulemaking pursuant to section 553(b) of the Administrative Procedure Act (APA), or any other law. . . ."

NPDES general permits are not "rules" under the APA and thus not subject to the APA requirement to publish a notice of proposed rulemaking. NPDES general permits are also not subject to such a requirement under the Clean Water Act (CWA). While EPA publishes a notice to solicit public comment on draft general permits, it does so pursuant to the CWA section 402(a) requirement to provide "an opportunity for a hearing." Thus, NPDES general permits are not "rules" for UMRA purposes but are treated with rule-like procedures.